



U.S. Department of the Interior
Bureau of Land Management
Division of Resources, Branch of Fluid Minerals

Great Falls Oil & Gas Field Station

May 2002



MACUM ENERGY INC.
KLABZUBA OIL & GAS INC.
OCEAN ENERGY RESOURCES INC.
Natural Gas Project

**FINDING OF NO SIGNIFICANT IMPACT
DECISION RECORD**



The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield to produce a combination of uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness, and natural, scenic, scientific and cultural values.

MT-92234-00-4



IN REPLY TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Great Falls Oil and Gas Field Station
1101 15th Street North
Great Falls, Montana 59401
(406) 791-7700



1792 (MT92234)

Macum/Klabzuba/Ocean EA

May 10, 2002

Dear Reader:

The Bureau of Land Management's (BLM) is providing you a copy of the attached Finding of No Significant Impact and Decision Record for your information and use. The Decision Record identifies BLM's decision, explains the rationale for reaching the decision, and includes the mitigating measures for the Macum/Klabzuba/Ocean Energy Natural Gas Project Environmental Assessment (EA).

On January 15, 2002, the BLM released the Macum/Klabzuba/Ocean Energy Natural Gas Project EA. Approximately 405 copies of the EA were distributed to federal, state, and local government agencies, organizations, industry and individuals. Public comments were accepted through February 15, 2002. BLM received 36 comment letters during the comment period. A summary of comments and BLM's response are contained in Appendix B. Public comments did not necessitate a revision of the EA.

The EA was prepared pursuant to the National Environmental Policy Act, other regulations, and statutes to fully disclose the potential environmental impacts of the alternatives and to solicit public comments on them. The proposed action is in conformance with the West HiLine Resource Management Plan (1988), the Proclamation for the Upper Missouri River Breaks National Monument (January 17, 2001), and the State Director's Interim Guidance for Managing the Monument (June 15, 2001).

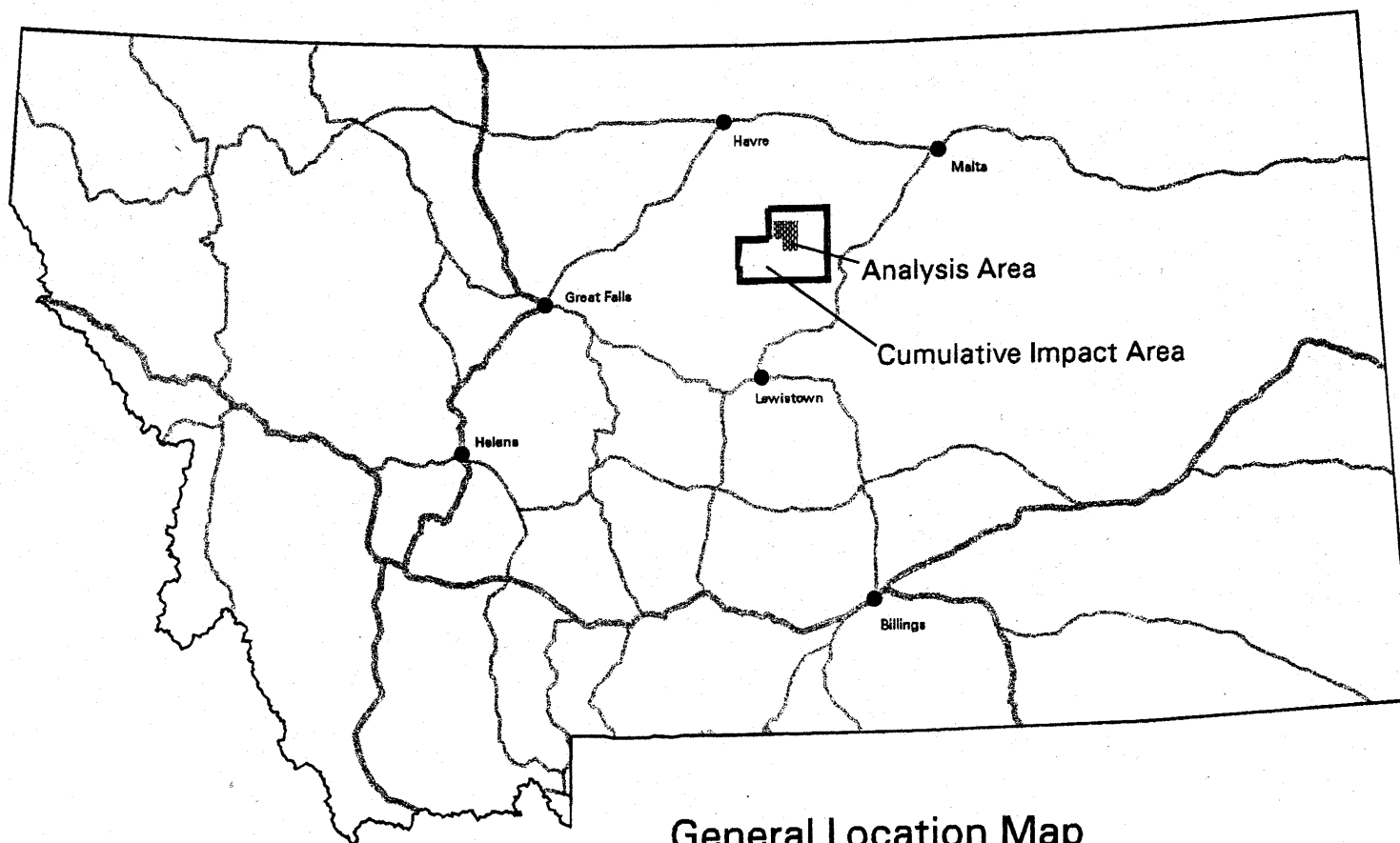
The BLM wishes to thank those individuals and organizations who provided input during the analysis process. Your input has been essential in assuring issues important to you were fully considered. If you have any questions regarding this decision, please contact me at 406-791-7700.

Sincerely,

Donato J. Judice
Field Station Supervisor

Attachment

MONTANA



General Location Map

MAP 1.1

MACUM/KLABZUBA/OCEAN ENERGY EXPLORATION PROJECT

MAP 1.2 Analysis Area

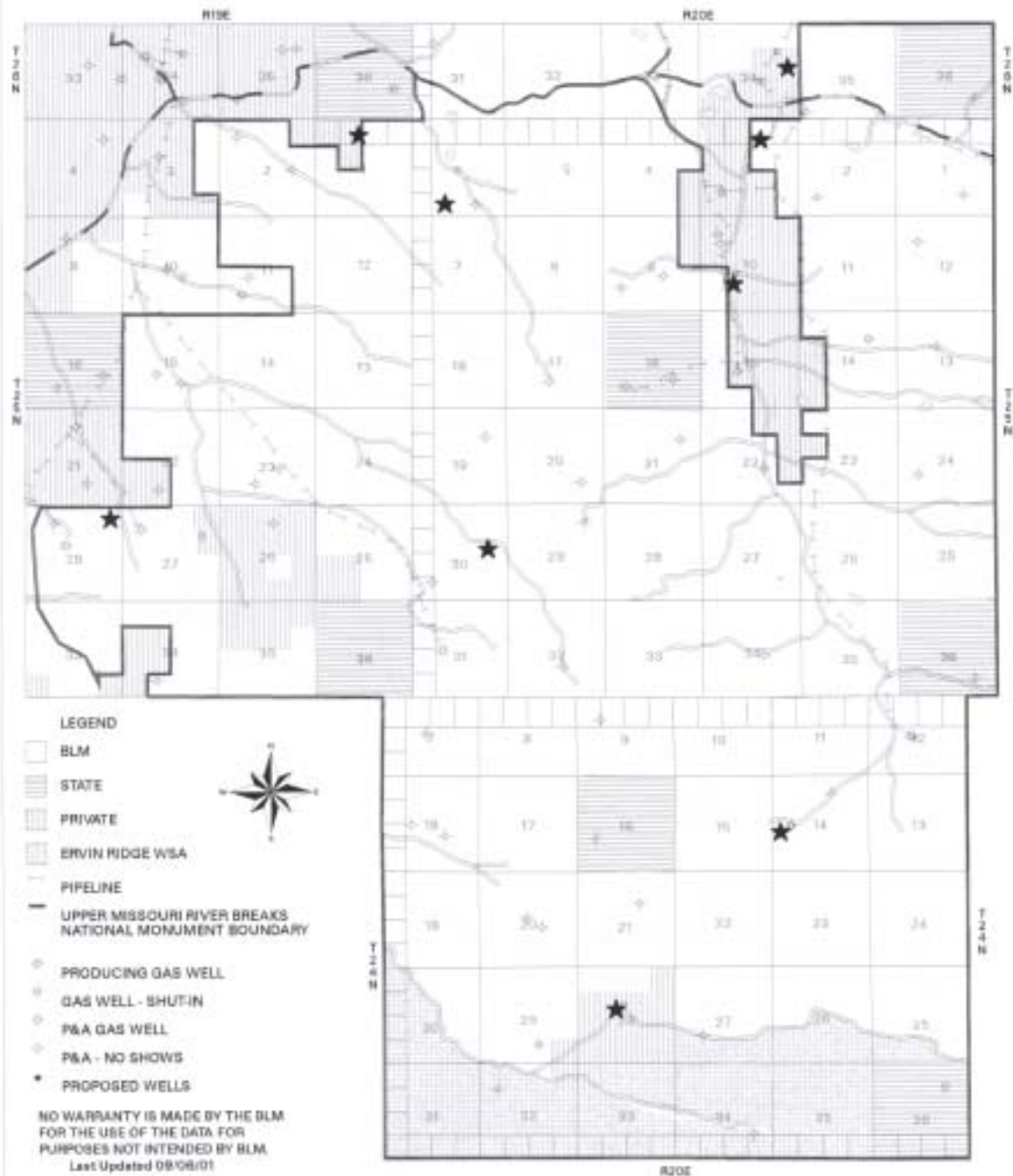


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**DECISION RECORD
AND
FINDING OF NO SIGNIFICANT IMPACT
FOR
MACUM/KLABZUBA/OCEAN ENERGY
NATURAL GAS PROJECT**

SUMMARY OF MACUM/KLABZUBA/OCEAN'S PROPOSAL

Macum Energy Inc., Klabzuba Oil & Gas Inc., and Ocean Energy Resources Inc. (Macum/Klabzuba/Ocean) propose to drill nine gas wells in the Bullwhacker Coulee area in and adjacent to the Leroy Gas Field in Blaine County, Montana (see Maps 1.1 and 1.2). These public lands are administered by the Lewistown Field Office (LFO), of the Bureau of Land Management.

DECISION

Based upon the analysis of the potential environmental impacts described in the *Macum/Klabzuba/Ocean Natural Gas Project Environmental Assessment* (EA) and, in consideration of the public, industry, and governmental agency comments received, it is my decision to approve, in part, the natural gas project submitted by Macum Energy, Inc., Klabzuba Oil and Gas Inc., and Ocean Energy Resources Inc. Approval allows authorization of necessary permits on public lands and minerals administered by BLM for all wells except Well #23-10. This well, requested by Macum Energy, Inc., is in the NESW, Section 10, T.25N., R.20E., located on Lease MTM89474, Blaine County, Montana. This specific lease is involved in a pending lawsuit, *Montana Wilderness Ass'n v. Tom Fry, et al., CV-00-039-GF-PGH*. I will defer any decision with respect to Well #23-10 pending the outcome of the lawsuit.

Approved project components include:

- Construction, drilling, completion, production, routine operation, and reclamation of up to eight natural gas wells.
- Placement of surface facilities such as separators, meter houses, and other equipment needed to produce natural gas for the life of the project.
- Access via 12.1 miles of existing improved and unimproved roads (of which 1 mile would be partially upgraded) and construction of 0.6 miles of new road would be authorized to allow the operators access to their individual leases as described in the Proposed Action.

Approval of these facilities is conditioned upon and subject to the following administrative requirements:

- Macum/Klabzuba/Ocean will implement the resource protection, mitigation, and monitoring measures found in Appendix A. Monitoring inspections conducted by BLM and Macum/Klabzuba/Ocean will be based upon these requirements and will be applied to all surface disturbing activities (i.e., placement of surface pipelines). BLM will conduct monitoring inspections of construction and rehabilitation operations through a BLM compliance officer or team effort to ensure that these measures are effectively implemented. Mitigation and monitoring measures could be modified by the authorized officer as necessary

to further minimize impacts. Final requirements will be determined upon results of on-site inspections by BLM, Macum/Klabzuba/Ocean personnel, and others, if deemed necessary.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based upon my review of the analysis in the *Macum/Klabzuba/Ocean Natural Gas Project EA* (January 2002), including the explanation and resolution of any potentially significant environmental impacts, I have determined that the Proposed Action is in conformance with the approved land use plan. With the mitigation measures described in the EA, which I intend to implement, the Proposed Action will not have any significant impacts on the human environment. Therefore, an environmental impact statement is not required.

MANAGEMENT CONSIDERATIONS/RATIONALE FOR DECISION

My decision for the *Macum/Klabzuba/Ocean Natural Gas Project EA* is based upon careful consideration of a number of factors including:

1. Consistency with Resource Management Plans - This decision is in conformance with the overall planning direction for the area. The West HiLine RMP states that "...BLM will continue to provide for the exploration and production of coal, oil, gas..." on public lands in the proposed area of exploration. It also states that "standard" and "special" protective stipulations are to be applied to development, and implementation would be on an "as needed" basis to prevent undue adverse impacts to other resource values. Standard and special protective measures were identified and incorporated into the Proposed Action to reduce or eliminate adverse impacts.
2. Public Involvement and EA Comments - Opportunity for public involvement was provided through the environmental process. A thirty (30) day public comment period was published January 15, 2002, so that the public could address issues and concerns on the EA and unsigned FONSI. The document was sent to 405 individuals, agencies, and organizations including governmental offices, elected officials, public land users, private landowners, interest groups, and state news media. Public meetings were held in Great Falls and Havre, Montana and a total of twelve (12) people attended. Thirty-six (36) comment letters were received. A summary of comments from the public and BLM responses are presented in Appendix B.
3. Measures to Avoid or Minimize Environmental Harm - The adoption of the mitigation measures identified in the Macum/Klabzuba/Ocean EA which I included in the Decision Record represent all practicable means to avoid or minimize environmental harm.
4. Monitoring and Enforcement Program - BLM and Macum/Klabzuba/Ocean will provide qualified representatives on the ground during and following construction to validate construction, reclamation, and other approved compliance checks commensurate with the provisions of this Decision Record. Appropriate remedial action will be taken by Macum/Klabzuba/Ocean in the event unacceptable impacts are identified during the life of the project.

5. Finding of No Significant Impact -

- The Upper Missouri River Breaks National Monument - By proclamation dated January 17, 2001, the President of the United States established the monument and outlined the protection and management of the area. Specifically, the proclamation states: *“The Secretary of the Interior shall manage development on existing oil and gas leases within the monument, subject to valid existing rights, so as not to create any new impacts that would interfere with the proper care and management of the objects protected by this proclamation.”* In addition, Washington Office Instruction Memorandum No. 2000-062 provides BLM policy on the interim management for newly created monuments. Utilizing both the company-committed mitigating measures and the additional measures added through this analysis, this action is consistent with the monument proclamation, Washington Office policy and the State Director’s Interim Guidance. The proposed action will not create any new impacts that would interfere with the proper care and management of the objects identified in the Upper Missouri River Breaks National Monument proclamation.
- The EA concludes that direct and indirect incremental change to the environment, introduced by implementation of this project on the affected resources, would be minimal. By minimizing or avoiding the introduction of adverse impacts, the net change in cumulative impacts introduced by this project, in conjunction with past, present, and reasonably foreseeable actions, is also expected to be minimal (EA pages 36 through 40).
- Anticipated surface disturbance to develop the gas resources would represent less than one tenth of one percent of the total area within the Analysis Area.
- According to the EA (page 22) there will be no effect to bald eagles, their prey base or important habitat by the proposed action. The EA (pages 22 and 23) also concludes that the bald eagle is the only Threatened or Endangered or Proposed species with suitable habitat within the project area.
- The EA (pages 22 and 24 through 26) finds that impacts to BLM Designated Sensitive Species are minor because there would be minimal removal of sagebrush, and very few mature ponderosa pine trees or snags will be removed. The proposed action will not remove any important or substantial habitat or individuals within the population.

The decision to approve the Macum/Klabzuba/Ocean natural gas project takes into account important management considerations, federal agency missions, and public need for natural gas. The decision balances these considerations with the degree of adverse impact to the natural and physical environment. This action will help meet public needs for oil and gas while minimizing irreversible or irretrievable commitment of other important resources.

COMPLIANCE AND MONITORING

Because of the importance of mitigation and for avoiding or minimizing impacts, a monitoring program shall be implemented by BLM (see Appendix C). Monitoring by Macum/Klabzuba/Ocean and BLM will be in accordance with this decision. Appropriate remedial action will be taken by Macum/Klabzuba/Ocean in the event unacceptable impacts are identified.

APPEAL

This decision is subject to appeal. Under BLM regulations, this decision is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this decision must include the information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, P.O. Box 36800, Billings, Montana, 59107, within 20 business days beginning the day following the date of publication of the notice of this Decision in the Great Falls Tribune.

CONCUR:

Stanley Jaynes (acting)
Assistant Field Manager, Havre Field Station

5/6/02
Date

CONCUR:

David L. Mari
Field Manager, Lewistown Field Office

5/6/02
Date

APPROVE:

Donato J. Padin
Field Station Supervisor, Great Falls Field Station

5-10-02
Date

APPENDIX A:

Mitigating Measures

APPENDIX A

PROJECT-WIDE MITIGATION MEASURES

Macum/Klabzuba/Ocean and its contractors and subcontractors will be required to conduct operations in full compliance with applicable federal, state, and local laws and regulations, and within the guidelines and stipulations specified in this Decision Record, right-of-way grants, and permits issued by BLM. Standard operating procedures for surface-disturbing activities must be adhered to during all proposed activities unless the Authorized Officer approves an exception in writing and only if conditions warrant.

In accordance with BLM regulation 43 CFR 3162.1(a) and Onshore Order No. 2, Macum/Klabzuba/Ocean will be responsible for compliance of its employees, contractors, and subcontractors with the terms and conditions of all permits, agreements, and mitigation measures described in the Decision Record. Each contractor and subcontractor will be required to maintain up-to-date plans and specifications at construction sites.

MITIGATING MEASURES

1. Soils having high wind or water erosion potential and/or rugged topography (i.e. steep slopes (>25%) floodplain, unstable soils/geomorphology/geology) will be avoided, where possible and if these areas are to be impacted, further site-specific reclamation procedures would be applied as directed by BLM.
2. Surface disturbance and/or occupancy would not occur on slopes in excess of 25%, nor would construction occur with frozen or saturated soil material or when watershed damage is likely, unless an adequate plan is submitted to BLM that demonstrates potential impacts would be mitigated.
3. All abandoned wells would be plugged according to 43 CFR 3160 Onshore Order No. 2 to protect and isolate all down-hole mineral and water-bearing zones.
4. Sites requiring the removal of soil and or vegetation will use the following procedures:
 - a. Identify soil type(s) and depth of topsoil/surface layer (usually 4-6 inches) for removal and stockpile separately for later use in reclamation.
 - b. Identify depth of subsoil layer (usually 6-12 inches) for removal and stockpile separately for later use in reclamation. The remaining deeper material will be used or moved as necessary to meet the needs for drilling activities.
 - c. Site reclamation will initiate with the ripping of any compacted areas and grading to blend with the adjacent site characteristics and topography. Any water bars required will be placed and shaped at this time. The stockpiled subsoil will be spread evenly across the site followed by the stockpiled topsoil. In no instances will grading material and or subsoil be placed over topsoil. The order of soil replacement will be the reverse of removal, e.g. first off, last on.
 - d. Topsoil and subsoil that is stockpiled and not respread within 30 days, will be protected from erosion and loss of material by planting a quick growing cereal grain such as wheat or barley.

In no instances will subsoil be allowed to be placed over topsoil. In addition, if topsoil mycorrhizae are compromised (due to compaction or anaerobic conditions), Operators may be required to supplant the soil with mycorrhizae to speed the recovery of the revegetation and return the soil to productivity.

- e. All seed mixes necessary to achieve site reclamation will consist of native grasses, forbs, shrubs adapted to the Soil and Ecological site (Range Site) and will be incorporated into each well's Condition of Approval. All seed sources will be certified as being Noxious weed seed free and the label will become a permanent part of the file. Reseeding if needed will employ harrow, broadcast, harrow or drill seeding procedures. In either method the last trip across the reclaimed site will be across the slope to approximate the contour and reduce risk of erosion.
 - f. Water bars would be installed on disturbed slopes as necessary to reduce erosion.
 - g. Some reclamation sites would be fenced as determined on a case-by-case basis by BLM.
 - h. Where appropriate, BLM approved herbicides, rates and techniques for weed control will be applied. This may include the use of selected biological control agents. Soil sterilants will not be used and any spills or accidental releases of material toxic to soils or vegetation will be promptly contained, cleaned up for proper disposal.
 - i. Removal of large trees and juniper mats will be discouraged and, if possible, the Operator(s) will work around those that can safely remain in place and not interfere with drilling operations.
 - j. The use of fertilizers or soil amendments is discouraged, unless monitoring has indicated a need to supplement soil nutrients or adjust a soil chemical imbalance. e.g. The use of pelletized elemental sulfur to adjust soil pH to promote seed germination and seedling growth.
5. Reclamation success would be monitored by Macum/Klabzuba/Ocean as directed by BLM, and if determined unsuccessful, further reclamation measures (e.g., reseeded, mulching, etc.) would be applied.
6. Paleontological and archaeological field checks by BLM personnel or other authorized personnel would occur prior to disturbance as deemed appropriate by BLM. Monitoring during surface-disturbing activities would be conducted by a BLM-approved archaeologist or paleontologist, as deemed appropriate by BLM. Paleontological or cultural resource sites would be avoided or mitigated as necessary prior to disturbance. Any cultural or paleontological resource discovered by an operator or any person working on his/her behalf would be reported immediately to BLM, and all operations that may further disturb such resources would be suspended until written authorization to proceed is issued by BLM Authorized Officer. An evaluation of the discovery would be made by BLM to determine appropriate actions to prevent the loss of significant resources. Macum/Klabzuba/Ocean would be responsible for the cost of any mitigation required by BLM, and BLM would provide technical and procedural guidelines to conduct the mitigation.

7. Macum/Klabzuba/Ocean would inform all persons associated with this project that they would be subject to prosecution for damaging, altering, excavating, or removing any archaeological, historical, or vertebrate fossil objects or sites.
8. Construction and facilities would be in conformance with Visual Resource Management (VRM) objectives for the VRM classes in the project area. Surface facilities would be located to minimize disturbance of the visual horizon and painted to blend in with the surrounding landscape. All attempts would be made to locate surface facilities such that they are not visible from Wilderness Study Areas.
9. If the well is a non-producer, pads will be fenced off from livestock by the Operators. The fence will be maintained by the Operators until the area is adequately revegetated as determined by BLM Authorized Officer.
10. All large equipment will be initially cleaned, washed and inspected by BLM personnel prior to use to control noxious weed spread. If the large equipment is removed to another job outside of the Bullwacker Coulee area, the equipment must be rewashed before returning to the Bullwacker Coulee area.
11. The pipeline corridors will not be used as trails (unless the pipeline is placed in an existing trail, for instance Ervin Ridge trail). Operators will install barriers to travel on these pipeline corridors to discourage travel.
12. The Operators will be required to waterbar steep pipeline sections, use fertilizer supplements on seeded locations and install netting to keep soil and seed mix in place. Temporary erosion control measures such as mulch, waterbars, or other appropriate methods would be used on unstable soils, steep slopes, where these areas may be impacted, to prevent erosion and sedimentation until vegetation becomes established. All of the measures will be designed to speed up revegetation and return the soil to productivity sooner. These measures will be determined on an individual basis by the BLM Authorized Officer.
13. The Operators will be responsible for eliminating any noxious weeds on the well pad and primary pipeline corridor throughout the life of the well + 5 years post-abandonment. Herbicide type, date and application rate as well as weather conditions at time of application will become a permanent part of the record/file for each drill site.
14. The Operators will be required to adjust their well maintenance needs to be outside of the closed or ill-advised travel period windows of spring thaw, summer storms or winter chinooks. Since these periods cannot be conclusively determined, Operators will use discretion in visiting the well sites.
15. The Operators will not be allowed to improve the trails, unless authorized by the BLM Authorized Officer. In the event of an emergency, Operators must contact either the Havre or Great Falls BLM Offices, 12 hours prior to accessing the wells. Further, the Operators will not be maintaining or blading any of the access trails unless flagged or authorized by BLM.
16. All permanent structures will be painted the neutral color of either Carlsbad Canyon (2.5Y 6/2) or

Desert Brown (10YR 6/3) as displayed in the Standard Environmental Color chart (available at the GFFS BLM office).

17. Wildlife mitigation measures shall be applied to those wells affected (see Table 2 in EA):

Mule Deer Winter Range and Elk:

No drilling or construction will be allowed from December 1 - June 30.

Bighorn Sheep Lambing Areas:

No drilling or construction will be allowed from April 15-June 15.

Sage Grouse:

If a new lek is discovered within ½ mile of any location, no drilling or construction will be allowed between March 1-June 30. The lek that is 1 mile from #42-34 is already protected due to distance and topography.

18. Thirty (30) day gas charts shall be required on all well meters.
19. Remote monitoring will be required in cases where it is both economically feasible and not intrusive to the viewshed.
20. If threatened, endangered, and candidate species or special status species are discovered, or if evidence of habitat (e.g., prairie dog town) is found during permitting, development, or production activities, the BLM, USFWS, and FWP would be consulted and appropriate mitigation measures would be implemented to ensure that no adverse impacts occur to these species.
21. BLM, Macum/Klabzuba/Ocean, and livestock permittees would monitor livestock movements, especially regarding any impacts from roads or disturbance from construction and drilling activities. Appropriate measures would be taken to correct any adverse impacts should they occur. No additional mitigation is recommended.
22. Before allowing trail improvements, BLM would ensure an intensive cultural resource inventory is completed on trails which have not been previously surveyed. Potential effects to significant cultural resources would be avoided by project relocation, data recovery or other appropriate mitigation measures.
23. Consideration has been given to prevent any one well location or combination of locations from dominating a particular view. Production equipment would be painted such that they blend with the surrounding landscape. Well locations, pipelines, and other linear intrusions would be located and designed to blend with topographic features, thereby reducing the visual contrast between these structures and the natural elements of the surrounding landscape. Every opportunity would be taken to reclaim existing roads/trails not used when new roads are designed over them. Additionally, portions of well locations not used during production and other disturbed sites would be reclaimed and reseeded as soon as possible, with the objective to have a stable, revegetated site within two years.
24. Before any construction begins, BLM, the Operator, and their contractors will conduct a field pre-work conference to ensure all mitigating measures are understood.

APPENDIX B:

Public Participation, Public Comments, and
BLM Comment Responses

Responses to Public Comments

Two lists are provided below. The first alphabetically lists the agencies, organizations, businesses, and persons who submitted comments on the EA and the assigned comment code. The second is an index of comment codes assigned to 15 subject categories.

List of Commenters/Codes

<u>Name</u>	<u>Comment Code</u>
Bennett, Dan and Judy	A2, M3, P3, P4
Crane, Thomas	M2, P4, R1
Cunningham, Bill	I2, M1, M3 O1, P1, W3
Dolman, Aart	I1, P4, R1
Ecology Center	M2, P1, P6, S1, T1, W1
Friends of the Missouri Breaks Monument	A1, A2, E1, H1, L1, L2, M1, M3, P1, P3, P5, R1, T1, W2, V1
Jennings, Gerry	A1, A2, P4
Miller, Alice	C1
Montana Wilderness Association	A1, A2, E1, H1, L1, L2, M1, M3, P1, P3, P5, R1, T1, W2, V1
Montana Wildlife Federation	A2, H1, I2, M3, P1, W2, W3
Starshine, D.	C1
Van Hyning, Dyrck	P1, R1
Wilderness Society	A1, A2, E1, F1, L1, M1, P1, P2, P3, W1, W2

Comments on the EA from the following list of letters were considered and are important to the decision-makers because they provide information on the opinions and preferences of the public, but the comments are considered nonsubstantive and are not responded to in the EA.

Blaylock, Sarah	Goodridge, William	McCollum, Judith Manuel
Bronec, Jeanne	Hanley, Jerry D.	Morgan, Dennis G.
Commissioners, Blaine County	Hanley, Juliann N.	Ostwald, Larry
Commissioners, Fergus County	Hanley, Patrick W.	Roy, Mary Beth
Commissioners, Phillips County	Jones, Marjorie	Skelton, Ted & Dorothy
Fisher, Sue Manuel	Klabzuba Oil and Gas, Inc.	Slade, Dale
Fultz, Helen	Macum Energy	Ulrich, D. Harvey
Fultz, Tom	Mannella, Erin M.	White Clay Society

Index of Comment Codes

<u>Subject</u>	<u>Comment Codes</u>	<u>Page Nos.</u>
Planning	P1 - P6	16-18
Alternatives	A1 - A2	19-21
Private Land Concerns	C1	21
Requests for Analysis/Consideration	R1	22-24
Economics	E1	24
Format	F1	25
Impacts	I1 - I2	25
Leases/Lawsuit	L1 - L2	25-26
Monitoring/Mitigation	M1 - M3	27-29
Operations	O1	29
Roads and Trails	T1	29-31
Soils	S1	31
Viewshed	V1	31
Water	H1	32-33
Wildlife	W1 - W4	33-36

The following pages are BLM's responses to substantive public comments on the EA. The comments have been taken from the letters submitted during the public comment period. The comments and responses are arranged by 15 categories (i.e. planning, alternatives, private land concerns, etc.); each one has its own subcategories, as appropriate. Many comments have been grouped and summarized if they were similar in substance. Each comment is followed by BLM's response.

Planning

P1 - Monument Plan needs to be completed first

Comment:

A variety of commenters asked that "decisions on gas inside the Monument should wait until the final Monument Management plan is developed and whether/if further gas development should take place."

Response:

The Secretary of Interior issued guidance to BLM to prepare a Resource Management Plan, which would include a transportation plan along with a field development plan to allow oil and gas leases with valid existing rights to continue. Furthermore, on June 15, 2001, BLM issued the Final State Director's Interim Guidance for Managing the Monument which states that the Monument lands will remain open to continued oil and gas development under existing leases, current lease restrictions, and BLM regulations. The reasons why a field development plan is not being considered at this time are summarized in the EA, page 2.

P2 - Purpose and Need

Comment:

BLM has stated that the proposed drilling is needed to acquire additional information about the underground resources in order to develop the field development plan. However, the EA fails to define this need or explain why there is not sufficient information from the numerous wells that have already been drilled in and around the Monument area.

Response:

As discussed on page 2 of the EA, in order to address the impacts of full field development for the Monument RMP, a reasonable foreseeable development (RFD) scenario is required. To accomplish this, additional information is necessary to accurately predict the location and intensity of future development. With the current spacing of wells within the Leroy Field at one well per 320 acres, the analysis area has had only 57% of the spacing units explored. While there are a number of dry holes within the analysis area, 76% were drilled over 20 years ago. Today's technology in well log interpretation and completion techniques have advanced the discovery of oil and gas in previously tested wells in the past 20 years. Because of the age of the dry holes and the lack of recent drilling, further exploration will better define the field.

P3 - How the EA relates to the West HiLine RMP

Comment:

The EA should explain what the West HiLine RMP says with regard to well spacing in this area and show how the proposed action is in conformance.

Response:

Statewide spacing regulations are established by the Montana Board of Oil and Gas Conservation and are generally for gas wells one well per 640 acres. Exceptions to spacing requirements may be granted by the Board. The Leroy Field spacing was established at one well per 320 acres in 1975. The proposed wells will meet these requirements. The explanation of well spacing in the West HiLine RMP is found in the 1988 Final, Appendix 1.3, page A-17.

Comment:

Not only was the consultation associated with preparation of the West HiLine RMP minimal and especially minimal with respect to gas leasing, pipelines and roads, but it occurred too long ago to be incorporated into this EA. Thus, the EA's claim that there has been consultation with the Tribes is arbitrary and capricious.

Response:

The information acquired from the tribes when developing the West HiLine RMP is still taken into account when BLM makes land use decisions that could affect historic properties of traditional religious and cultural importance to a tribe or places which are sensitive in contemporary traditional cultural practice (human burial sites, shrines, prayer sites, rock art, etc.). The BLM has acquired additional information from the tribes when consulting on a variety of land use actions since the RMP was completed. We currently meet with the tribes at least once a year to discuss land use actions. No tribe has expressed concerns regarding oil and gas actions within the cumulative impact area of the Macum/Klabzuba/Ocean Natural Gas Project EA.

The BLM sent the EA and an invitation to comment to several tribes and tribal cultural organizations and one individual. A representative of the Gros Ventre Tribe responded with a general concern that oil and gas development activities should not disturb Gros Ventre burials, although he was unaware of any specific burials in the EA cumulative impact area. It is BLM policy to consult with the tribes when Native American burials or human remains are found during cultural resource inventories completed for oil and gas projects. If a burial is exposed during oil and gas operations, work in the vicinity of the discovery must stop and BLM consults with the tribes.

P4 - EA needs to be an EIS

Comments:

With a project of this proportion the BLM should be completing an EIS rather than an EA before any approval of exploration takes place.

Since the effective date of the National Environmental Policy Act, January 1, 1970, no lease allowing surface occupancy can be issued without preparation of and (sic) Environmental Impact Statement.

Response:

Based on the review of the analysis in the EA, BLM determined that no significant impacts to any resource would occur as a result of the proposed project directly, indirectly, and/or cumulatively; therefore, preparation of an EIS is unnecessary. As CEQ guidance provides, an environmental assessment should be a concise document which: “(1)...briefly provides sufficient evidence and analysis for determining whether to prepare an EIS; (2) it aids an agency’s compliance with NEPA when no EIS is necessary, i.e. it helps to identify better alternatives and mitigation measures; and (3) it facilitates preparation of an EIS when one is necessary.” The Macum/Klabzuba/Ocean Energy EA has met these requirements.

P5 - Size of Analysis Area

Comment:

The analysis area defined in the EA is arbitrary. It includes APD sites both inside and outside the Monument, sites both inside and outside the Leroy gas field, sites near existing gas pipelines and sites which are miles (12 miles) from existing gas lines, as well as a site which is adjacent to the Ervin Ridge Wilderness Study Area. Each of these criteria affects the analysis on impacts to resources. There needs to be a discussion of why the size of the analysis area is neither arbitrary nor capricious. The increased size of the analysis area permits the EA to state that the disturbance of nine acres is insignificant. If a smaller area was more appropriate or if the APD’s were divided into smaller groups, the percentage of disturbance would increase.

Response:

The EA (pages 36-40) addresses the direct, indirect, and cumulative impacts of past, present and reasonably foreseeable actions at three spatial scales: on individual well sites; within the analysis area; and within a 900 square mile cumulative impact area surrounding the analysis area. Federal regulations and the courts give the agency latitude to determine the appropriate spatial scale of analysis.

P6 - Scoping

Comment:

...this project ...was scoped with little public notice (EA8).

Response:

The EA (page 8) describes the dates each proposed well was posted for public notice. The posting of these Applications for Permit to Drill commences upon receipt and is required to remain posted for 30 days, per 43 CFR 3162.3-1(d). The role of public participation was afforded through the 30 day comment period of this EA.

Alternatives

A1 - EA needs more Alternatives

Comment:

One of the most significant deficiencies with this EA is that it fails to provide a true range of alternatives, as required under the National Environmental Policy Act.

Response:

BLM has addressed the impacts of the No Action Alternative in terms of each affected resource and in comparison to the Proposed Action. The EA examines a reasonable range of alternatives, including a brief description of alternatives considered but not analyzed in detail.

A2 - Suggestions for Alternatives

Comment:

...the EA should have included an alternative that denied certain APDs in sensitive areas and explored the option of allowing drilling from less sensitive areas on the lease. For example, the four well sites outside the Monument boundary could have been permitted as proposed and some-or all-of the well sites proposed for inside the Monument could have been sited elsewhere on their respective leases (i.e. either outside the Monument on an existing track or inside the Monument but from an existing well pad).

Response:

The EA (pages 31-35) addresses the effects of the action on the objects of historic and scientific interest of the Monument. The EA found no reason to analyze any of the proposed wells in an alternative location, given the mitigation measures attached to the APD's. The location of proposed wells were determined by the operator after careful consideration of access, construction needs and subsurface geology. During the onsite inspection and subsequent reviews, BLM examined these proposals to ensure their conformance with the West HiLine RMP and the State Director's Interim Guidance for Managing the Upper Missouri River Breaks National Monument. If any well were in conflict with decisions in these plans, BLM would move the proposed well to reduce/eliminate impacts. Through this process, BLM moved one well and found no reason to relocate any of the other proposed wells.

Comment:

There are proposed wells outside the boundaries that could be tested for volume of gas available underground without breaking grounds and roads within the monument....There is plenty of land throughout the USA than can be tapped for oil & gas - let's keep them out of the monument.

Response:

The Proclamation for the Upper Missouri River Breaks National Monument clearly states that it is “subject to valid existing rights.” Additionally, on June 15, 2001, BLM issued the Final State Director’s Interim Guidance for Managing the Monument which states that the Monument lands will remain open to continued oil and gas development under existing leases, current lease restrictions, and BLM regulations. The proposed wells are located on valid leases which entitle the leaseholder to develop their property pursuant to the terms and conditions of the lease.

Comment:

In order to comply with its NEPA responsibilities the BLM needs to add an alternative wherein the revocation of all illegally issued leases is discussed.

Response:

BLM believes there are no illegally issued leases within the EA analysis area, and therefore, an additional alternative to address this issue is unnecessary.

Comment:

An alternative should be included in the EA, which analyzes the forfeiting of, or buying leases and compensating owners of such lease giving lease owners an option (to) pursue that course of action in Congress.

Response:

The purpose of the EA, as defined by NEPA, is to analyze the direct, indirect, and cumulative impacts of a proposed action on the environment and any reasonable alternative. BLM does not consider forfeiture and buying back leases as a reasonable alternative. The authority to compel the lessees to accept either a buy-out or trade-out, and to empower the Secretary of Interior to implement it, would have to come from Congress and the President in the form of enacted law. It is not reasonable to analyze such an alternative because there is no notion of feasibility, the possibility of implementing it is highly remote, and it would probably not provide sufficient information to permit a reasoned choice of alternatives.

Moreover, this alternative doesn’t meet the direction established under the proclamation for the Upper Missouri River Breaks National Monument to manage development on existing oil and gas leases.

Comment:

When the BLM moves forward with considerations of the Monument plan, it should not be burdened with brand new well sites, roads and gas pipelines which did not exist before the Proclamation. Thus, the BLM needs to address these issues in an alternative that halts development of APD’s in the Monument boundary pending completion of the plan.

Response:

BLM does not believe that this is a reasonable alternative because the Proclamation for the Upper Missouri River Breaks National Monument clearly states that it is “subject to valid existing rights.” Additionally, on June 15, 2001, BLM issued the Final State Director’s Interim Guidance for Managing the Monument which states that the Monument lands will remain open to continued oil and gas development under existing leases, current lease restrictions, and BLM regulations.

Comment:

Another failure of the two alternatives discussed in the EA is that the “no action” alternative has little, if any, substantive analysis, and neither alternative has any discussion of a cost/benefit analysis as required by NEPA...Therefore, an alternative should be included in the EA which analyzes forfeiting or buying leases and compensating owners. Such an alternative may provide lease owners with an option of whether to pursue such a course of actions with Congress.

Response:

Council on Environmental Quality regulations, 40 CFR1502.23, do not require a monetary cost benefit analysis. The BLM is comparing alternatives based on non-monetary resources, not comparing the costs of the two alternatives. Thus, selection of an alternative will not be based on the best economic return to the government.

Private Land Concerns

C1 - Private Land Concerns

Comments:

I am concerned about the Macum/Klabzuba/Ocean EA because private property has been grouped with Monument property. THAT IS NOT FAIR. Private property must be separated out NO MATTER WHAT THE RULES ARE.

The EA for Macum/Klabzuba/Ocean Energy Natural Gas Project just might result in controlling owners of land within the Monument saying that gas wells cannot be drilled on their land. While I feel gas wells should not be drilled on public land within the Monument, certainly owners of private land within the Monument MUST BE FREE TO DO WHAT THEY WANT WITH THEIR LAND.

Response:

The EA includes private property only to address cumulative impacts except in the instance when federal minerals underlie private surface. BLM has no authority to prohibit a private land owner from doing “what they want with their land.” However, of the nine proposed wells, four are located on split estate lands (i.e. private surface over federal minerals). In these cases, BLM must comply with NEPA when managing the oil and gas activity because the surface disturbance is caused by a federal action.

Requests for Analysis/Consideration

R1 - Requests for Analysis/Consideration

Comment:

...no meaningful analysis of light, noise, and exhaust plume pollution resulting from permitted gas flaring...

Response:

The EA analyzes the impacts from the proposed action on air quality (EA pages 19-20) and noise (EA page 29). There are requirements from both the BLM and the Occupation Safety and Health Administration on the safety practices for flaring gas. The duration of gas flaring/venting is short-term, and is generally needed only once or twice during the life of the well, lasting only 6 to 12 hours. Any perceived impacts from this activity involving light, noise, and exhaust would be insignificant.

Comment:

Also what is not known is the internal, or below surface damage which is often the result of underground or above ground pipelines.

Response:

There are safeguards on the pipeline system which enable the leaseholder the ability to detect leaks resulting from a pipeline failure. Recording equipment, which senses pressure, is installed on the pipeline system away from the field. Pipeline representatives visit these facilities on a daily basis and would be provided pressure information relating to a pipeline failure. Where remote monitoring devices are employed, there is instantaneous information about the well which would provide immediate notification to the operator of breaks/leaks in the pipeline system.

Comment:

BLM must consider whether the Upper Missouri River Breaks National Monument area contains higher values, other than mineral extraction. The Mineral Land and Mining General Regulations 30 USCS 21, n6-9 *Land worth more for other uses*-...

Response:

The portion of the U.S. Code referenced in this comment doesn't require an evaluation to determine if lands are "mineral land" or "valuable for minerals" during an agency's review of a proposal to develop Federal minerals. The section of the U.S. Code and case history referenced in this comment is specific to interpreting the law when deciding if certain lands should be reserved by the United States because they are valuable for minerals, an action that is completely outside of the scope of this EA.

The Proclamation for the Upper Missouri River Breaks National Monument clearly states that oil and gas development is “subject to valid existing rights.” Additionally, on June 15, 2001, BLM issued the Final State Director’s Interim Guidance for Managing the Monument which states that the Monument lands will remain open to continued oil and gas development under existing leases, current lease restrictions, and BLM regulations. The proposed wells are located on valid leases which entitle the leaseholder to develop his/her property pursuant to the terms and conditions of the lease.

Comments:

When one studies the entire Upper Missouri River Breaks National Monument, there is no well that is now or ever has been producing “paying quantities.” The BLM should petition the State Oil and Gas Board to disband the Leroy Field in Township T25N-R20E, T24N-R20E, 7 section in T25N-R21E and one section in T24N-R21E. To have a gas field, paying quantities must be present and none are.... By allowing development in an area proven not to have “paying quantities” the agency puts the public at risk for future cleanup of well sites the developer cannot pay for.

The MWA joins with VanHynning’s demand that the boundaries of the Leroy Field should be modified.

Response:

The presence or absence of a Montana Board of Oil and Gas Conservation delineated field does not impact the ability of an operator to drill a well; it only establishes the rules of mineral development within that boundary. The boundaries of the Leroy Field, as set by the Board, were established at the request of interested parties (usually an operator) to develop drilling spacing rules specific to the areas within the field boundaries. In this case, it was argued that gas development within the Leroy Field could not drain 640 acres with only one well. Therefore, the acreage allocated to each gas well for Leroy Field was decreased from 640 acres to 320 acres per well and the offset distance for the well location was decreased from 990 feet from the section boundary to 660 feet from the 320 acre boundary. The nature of the gas deposits within the Eagle Formation will not change simply because the boundary of the National Monument is crossed. The argument that supports one gas well for every 320 acres outside of the Monument has, and will continue to support, the same spacing inside the Monument in this area. Contracting the Leroy Field boundary does not "disallow" development outside the field boundaries.

The Eagle Formation can be very productive and has reserves in excess of 500 million cubic feet (MMCF) of gas when the conditions are correct. Eagle wells have been discovered within these described areas and one well has produced more than 150 MMCF of gas. The main factor limiting development in this area has been the lack of infrastructure in the form of gas gathering lines. As these lines are extended into the area, production of these wells will be economically justified.

With respect to the risk of “developers” not paying for the cleanup of well sites, BLM analyzes the financial capability and risk exposure of each operator on federal leases. Bonding amounts are established for each operator based on this analysis to minimize the risk of a well site being left without reclamation.

Comment:

The potential development of “shut in” wells as part of the expected results of this EA was not analyzed...Regulations provide that the BLM must determine the status of “shut in” wells to find out if they are capable of production in paying quantities. Otherwise, in the absence of such a showing, leases cannot be extended beyond their fixed term.

Response:

The EA (e.g. pages 18 and 30) analyzed the potential development of three shut-in wells that were reasonably considered to be connected to a pipeline. BLM periodically has performed a review of each of the subject leases consistent with 43 CFR 3107.2-3, Leases Capable of Production. In the past, BLM has accepted well test information from shut in wells as an indication of the capability of the well to produce in paying quantities. At the time the well was completed, its reserves and production capability may not have been high enough to justify a pipeline connection to a distant gathering system. Given the fact that gathering systems expand as more productive wells are found, a well shut in upon completion, can eventually be tied in and produced when the gathering system expands within the proximity of the well.

Economics

E1 - Economics

Comments:

The proposed FONSI states that the “public need for natural gas” was incorporated into this decision. The legal basis for including this criterion should be documented and the EA should include an explicit cost/benefit analysis that includes the likelihood of finding recoverable gas and the expected amount.

There needs to be thorough economic analysis of whether the leases and the leases holding the “pre-NEPA” leases are capable of producing gas in paying quantities.

Response:

The public need for natural gas is not incorporated into the analysis. It is only one of the considerations the decision maker weighs in making a decision. The relevant language in the FONSI states,

The decision to approve the Macum/Klabzuba/Ocean natural gas project takes into account important management considerations, federal agency missions, and public need for natural gas. The decision balances these considerations with the degree of adverse impact to the natural and physical environment. This action will help meet public needs for oil and gas while minimizing irreversible or irretrievable commitment of other important resources.

Council on Environmental Quality regulations, 40 CFR1502.23, do not require a monetary cost benefit analysis. BLM is not comparing the costs of two alternatives and thus is not selecting an alternative based on the best economic return to the government. BLM is comparing alternatives based on non-monetary resources, thus a cost benefit analysis is not required.

Format

F1 - Format

Comment:

A table of contents is needed to be better guide the reader in finding information in the EA.

Response:

A Table of Contents has been included as part of the errata section in Appendix C.

Impacts

I2 - Cumulative Impacts

Comments:

The discussion about cumulative impacts...fails to make the case for not analyzing the impacts of full field development.

The EA states that issues regarding right of ways for roads and pipelines will be analyzed later. Since potential roads and pipelines are part of the cumulative effect of gas development, it should be analyzed in this EA.

Response:

This EA (page 3) analyzes the cumulative disturbance associated with the installation of potential pipelines. However, the final location of the pipelines cannot be approved until BLM receives and evaluates a pipeline proposal. For the analysis of environmental impacts for pipelines beginning on page 19 of the EA, the pipeline length and direction were estimated based on existing pipeline infrastructure and a logical tie-in point.

Leases/Lawsuit

L1- Valid Leases

Comments:

A map showing the leases in the analysis area should be included as well as information describing how the older leases (i.e. leases from late 1960s/early 1970s) were kept valid. Verification of valid existing rights should be part of the inventory process in the Monument management plan. Thus, if this EA is going to permit any drilling in the Monument, it must first go through a similar process of verifying the validity of the pertinent leases and clearly document how these leases were kept valid.

Two leases listed in the EA, MTM 13818 and 16102, may not be valid because they have been held by production through a “shut in” well. Lease number MTM 16103 may not be valid because there has been no recent production in paying quantities from the well which holds this lease by allocated production.

Response:

A map showing leases in the analysis area was unnecessary.

BLM periodically has performed a review of each of the subject leases consistent with 43 CFR 3107.2-3, Leases Capable of Production. In February 2002, all the leases within the Monument were reviewed and were determined that they remain in good standing. This detailed information is beyond the scope of the EA, but is available for review in the Great Falls BLM office.

L2 - Lawsuit

Comments:

The cover letter states that the decision to grant one of the proposed wells (#23-10) will be deferred because it is on a lease involved in a pending lawsuit. The cover letter or the EA should provide more background on the claims made in this lawsuit and its relevance to the proposed action and this EA. Specifically it should address whether the ruling on this lawsuit could impact the determination of validity for other leases involved in this EA and proposed action.

The EA mentions the pending lawsuit brought by the Montana Wilderness Association and states that one lease is named in that suit. The EA, however, does not address whether the suit will potentially affect the other leases. An outcome favorable to the plaintiff in the suit may significantly change a cost/benefit analysis of the proposed drilling. This potential impact was not analyzed nor was it mentioned in enough detail to apprise the reader of the suit’s impact on the validity of leases and on the costs of proceeding with drilling. It is inappropriate to conclude that the lawsuit only potentially affects the leases actually listed in the lawsuit. If the MWA is successful in showing that the West HiLine RMP is an inadequate NEPA document for permitting leasing, then all leases issued under its cover will be subject to challenge.

Response:

The purpose of the EA, as defined by NEPA, is to analyze the direct, indirect, and cumulative impacts of a proposed action on the environment and any reasonable alternative, so that the agency decision maker can make a reasoned decision. Addressing lease invalidity is not a reasonable alternative for consideration by the agency. Lease invalidity would occur through judicial action and not within the “Alternatives” section in the EA.

Monitoring/Mitigation

M1 - Monitoring to be done by BLM

Comment:

The proposed FONSI states that BLM and the applicants will provide qualified representatives on the ground to conduct compliance checks and states that a monitoring program shall be implemented *by the applicants*. It is doubtful that leaving enforcement to the applicants will ensure that the mitigation measures are fully implemented and any problems adequately addressed. Instead, the BLM should define the monitoring plan in detail in the EA, and conduct all compliance checks.

Response:

Respondent is correct. The sentence in the FONSI should include BLM as the primary agent for monitoring. A monitoring program is added to the errata section of Appendix C.

M2 - Mitigation Effectiveness

Comments:

In general, your considerations do not fully address nor do they provide for complete mitigation of the continuing incremental and cumulative degradation and resulting ecosystem conversion of the reference portion of the Missouri River Breaks due to the BLMs persist permitting of gas drilling in the Breaks.

Specifically, my issues are the lack of appropriate complete mitigation measures to reverse past and continuing incremental fragmentation of the area as a result of road building and possible gas pipeline construction...

However, the EA provides no evidence that the proposal is compatible with proper care and management of the resources, values and other objects elaborated in the text above. Assertions that mineral drilling and exploration and access routes proposed here are compatible with these resources, values and objects are not documented by any quantitative evidence or monitoring...For example, assertions that the Bullwacker area, which is said to contain “some of the wildest country on all the Great Plains, as well as important wildlife habitat(,)” (Proclamation), can withstand the kind of development proposed here and still retain its wild character, are not documented. ...Effectiveness of mitigation measures, such as Mitigation measure #8 have not been demonstrated.

Response:

Incremental fragmentation of the area isn't identified as an impact in the EA because only .6 miles of road on private land would be built to access the well sites. Pipeline construction has been eliminated from further consideration across Bullwacker Coulee. Potential pipeline routes are expected along ridges and bluffs because of the location of existing and proposed wells and avoidance of steep slopes and erosive soils. Fragmentation from new construction is only expected for a short time frame as a result of building pipelines. However, this activity will not add to existing fragmentation because pipeline routes should be successfully reclaimed because of favorable soil conditions along ridges and bluffs.

On pages 31-35, the EA discusses how this project is compatible with the proper care and management of the resources, values and other objects as outlined in the Proclamation. When the Monument was established, oil and gas drilling were included and allowed to continue on existing leases. Gas drilling has previously occurred in the Bullwacker area, and the Proclamation still characterizes the area as “some of the wildest country on all the Great Plains, as well as important wildlife habitat.” Most of the Bullwacker area cannot be drilled due to restrictions on slopes and erosive soils. Minimizing disturbance to the visual horizon and painting facilities to blend in with the surrounding landscape have been found to be effective by BLM in Montana and throughout the West on BLM-managed oil and gas activities.

M3 - Types of Mitigation/Monitoring

Comment:

I strongly recommend that the 0.6 mile of new trails (two-tracks) proposed be rehabed and replanted (page 12).

Response:

The construction of 0.6 miles of new trail is necessary for access to the well location from the existing road. The 0.6 miles of new construction is for both Well #42-34 and Well #22-28, which are both located on private surface. The reclamation and rehabilitation of the 0.6 miles will be performed to the satisfaction of the private landowners. Well #42-34 is located within a cultivated field, so the private landowner requests to have the 0.4 miles of road reclaimed immediately upon completion of drilling operations. If Well #42-34 is successful, access would be accomplished by driving through the planted crop. Well #22-28 is also located on private surface. If Well #22-28 is successful, then the 0.2 miles of new construction will remain for the life of the well until it is abandoned. However, due to the nature of the low impacts of drilling duration and infrequent visits to the well, the new construction will reclaim into a two-track trail in just a few years. At final abandonment of the well, the 0.2 mile will be permanently rehabilitated and reclaimed.

Comment:

In private conversation the BLM has committed to provide the resources necessary to adequately monitor activities on the Bullwacker. It would be reassuring to see this commitment made explicit in the EA. This should include a discussion of where the funds and personnel will be obtained.

Response:

The Great Falls, Havre, and Lewistown Field Offices are staffed with individuals with responsibility for the management of the Monument. Reference the monitoring program in errata section of Appendix C.

Comments:

A program needs to ensure mitigation measures are completed by the lessee to the satisfaction of the public. EA stipulations for reclamation to be completed within two years are inadequate, even if completed within a six-month time frame.

There is an inconsistency in the EA regarding revegetation of disturbed sites. The EA states that the work will be done as soon as possible and within two years but also states that it will be done in six months. There is also a comment that the BLM may require operators to clean vehicles, but there is no provisions for monitoring or enforcement. Since the spread of weeds and impacts on fragile soils are important issues, it appears that a fully articulated enforcement and monitoring program must be addressed. Furthermore, with respect to the revegetation issue, the standard should be within six months.

Response:

The EA (page 21) states, "Following well completion and pipeline installation, the locations and corridors will be ripped and replanted within six months of drilling, thus reducing compaction." This six (6) month timeframe is for the Operators to re-seed the location and corridors following cessation of drilling. The two (2) year timeframe is the estimated time it will take for disturbed areas to be revegetated and hold the soil. A modified Mitigating Measure #24 is included in the errata to clarify the timeframe for reclamation.

All vehicles will be inspected by the Great Falls staff at the time of drilling and construction. Great Falls, Havre and Lewistown staff will monitor the introduction of weeds on pipelines and roads. Weed monitoring is an ongoing activity for all BLM field staff. Mitigating measure #13 requires the operator to control weeds throughout the life of the well + 5 years post-abandonment. Reference the monitoring program in errata section of Appendix C.

Operations

O1 - Operations

Comment:

On page 4 it('s unclear as to why Macum needs 7 days to drill each well compared to only 3 to 5 days by the other two applicants. Is this another indication of inadequate resources?

Response:

BLM agrees with the respondent and appreciates the identification of inconsistencies. The 7 days for drilling each well was meant to include the construction of the location. The time for drilling each well will be "3 to 5 days."

Roads and Trails

T1 - Roads and Trails

Comment:

The BLM must do a comprehensive travel plan as part of its management plan for the Monument. The travel plan should be done before embarking on projects which affect travel within the Monument.

Response:

BLM agrees with the respondent on the need for a travel plan. The Resource Management Plan for the Monument will contain a transportation plan as mandated by the Proclamation, “The Secretary of the Interior shall prepare a transportation plan that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.” However, BLM is managing the area in the interim pursuant to the State Director’s Interim Guidance (June 15, 2001). The guidance states, “Surface construction for new well pads, roads, pipelines and associated facilities will involve the minimum acreage necessary for safe operation in order to mitigate impacts to Monument objects. Existing rights-of-way and roads will be used for new operations as much as possible to avoid impacts that interfere with proper care of Monument resources.” The 0.6 miles of new road construction is all on private land and BLM cannot place or enforce travel restrictions on private land.

Comment:

The EA is inconsistent in its description of whether new trails may be built. Page 12 of the EA states that no new trails will be built but then describes the building of new trails. The analysis is flawed and does not provide a cumulative analysis which the Monument travel plan will require.

Response:

The respondent may have misunderstood the statements on page 12 of the EA. The sentence reads, “All locations, **except** #42-34 and #22-28, intersect existing trails, thus no new trails will be built [on BLM surface].” (Emphasis added.) The EA then describes the need for 0.4 mile of new trail for the #42-34, and 0.2 mile of new trail for the #22-28 on private surface. The EA consistently analyzes the 0.6 mile of new trail construction throughout the document, therefore, the analysis is not flawed.

Comment:

No evaluation of roadless characteristics has been conducted.

Response:

The area is not considered roadless. Homesteading, agriculture, oil/gas, tourism and hunting have all resulted in trails in this area.

BLM completed the initial inventory decision for the Montana wilderness inventory in August 1979. This initial inventory reviewed the roadless areas of five thousand acres or more and roadless islands of public lands identified as having wilderness characteristics. For the purposes of BLM’s wilderness inventory, the word “roadless” refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road (BLM Manual H-8550-1).

Comment:

The possibility of the road network of the project leading to higher use of ORVs and off-road riding has not been explored.

Response:

The implementation of the Proposed Action would not have an effect on the amount or distribution of ORV use. Furthermore, ORV use will remain the same and would not lead to a higher use because the road network is pre-existing. The EA does analyze the addition of 0.6 mile of new construction, all of which is located on private land.

Soils

S1 - Soils

Comment:

The EA admits that there are areas with “excessive soil erosion potential” (EA 13), but does not evaluate potential impacts of the project in such areas.

Response:

The areas with excessive erosion potential (pg 13) were describing the area in generalities. The Breaks are a highly erosive environment, yet there are areas where the soil is not highly erosive, primarily on the ridge tops. The proposed wells were all located on these ridge tops. During the onsite, site-specific soil surveys were done by the BLM Soil Scientist to ensure that the location was not placed on highly erosive soils. Furthermore, the West HiLine RMP, page A-58, does not allow use or occupancy “...on slopes over 30 percent or 20 percent on extremely erodible or slumping soils.” None of the locations exceed 20% slope. Therefore, the “excessive soil erosion potential” statement does not apply to the proposed well sites.

Viewshed

V1 - Viewshed

Comment:

...the EA assumes that visitors will not be disturbed by the sight of drilling rigs, activity and gas development. This assumption is not based on any studies and, therefore, is an arbitrary conclusion. The EA needs to address the viewshed in more than a conclusory fashion....Moreover, when the EA admits that the visual resource has been affected by past gas development, that admission does not address the issue at hand about how the cumulation of further gas development will harm the visual resource. There is no analysis on this point.

Response:

The EA, page 28, does conclude that there would be a visual impact from drilling operations and gas development, but the impacts are minor and short term. The statement that draws conclusions of the visitor's preference is deleted (see errata section in Appendix C).

Water

H1 - Water

Comments:

...the EA needs to do a complete clean water analysis of potential effects should spills and overflows occur. The EA does not integrate that statement with the Clean Water Act and non degradation regulations under state law.

The EA does not analyze the potential harm from dam failures, downpours or other water events. Moreover, although the EA states that water produced in some wells may be blown into the atmosphere, there is no analysis of the contamination of ground water or soil from the “blown” water.

Response:

The EA doesn't include a complete clean water analysis for potential spills and overflows. The risk of spills, overflows and potential water quality impacts are minor. Almost all of the producing wells within the analysis area are dry gas wells. Only two wells (i.e., one Federal well and one private well) produce water.

The only Federal well with produced water that could result in a spill is the Macum #15-1. The State of Montana has already assured that discharge of this water to a stock reservoir or the ephemeral drainage downstream from this stock reservoir is in compliance with the nondegradation regulations. This occurred before a discharge permit was issued to Macum Energy, Inc. on March 25, 2002, under the Montana Pollutant Discharge Elimination System.

Disposal of produced water and the potential for spills is not expected from the proposed action and cumulative oil and gas activities because of the low frequency of water production with the gas wells in the analysis and cumulative impact areas. However, if water is produced as a result of the proposed action and cumulative oil and gas activities, its expected to exhibit water quality characteristics similar to water produced from the Macum #15-1. BLM would consider the quality of produced water and potential effects before approving any future disposal actions. This is required by BLM's oil and gas regulations for disposal of produced water (i.e., Onshore Oil and Gas Order No. 7). The quality of produced water and potential impacts has a direct bearing on the type of disposal BLM can approve under its regulations.

The EA doesn't analyze the potential harm from dam failures, downpours or other water events because the average rainfall for this area is approximately 14-20 inches per year. There is very little flowing water in the area and the proposals aren't close to any water resources. As described above and in the EA, the proposed action and cumulative oil and gas activities aren't expected to contribute to increased water flows or obstruct either ephemeral or perennial streams or coulees.

The practice of blowing produced water to the atmosphere involves a very small quantity of water. Although it doesn't occur within the Monument, it does occur on wells in the cumulative impact area that produce both gas and water. In low volume gas wells, water is not continuously unloaded and eventually accumulates in the wellbore. This increases backpressure on the well and suppresses gas

production. In order to remove this barrier to gas production, the water is lifted to the surface and blown to atmosphere by bypassing the surface flowline of 50 psi. This practice of blowing water to the atmosphere from the top of the well involves about 10 gallons of water discharged through a 2 inch pipe for approximately 3 minutes, once or twice per month. The result is a very fine mist which normally evaporates in the air. The BLM has monitored this practice on wells within the cumulative impact area, along with numerous locations in north-central Montana, and has not discovered any effects from this type of activity. As a result of this experience, the BLM doesn't expect this practice to impact either ground water or soil. As part of the monitoring program (Appendix C), BLM will evaluate this procedure. If it is discovered that there is resource damage occurring, the operator will be required to reclaim the affected area. Furthermore, the operator will be prohibited from continuing this practice, and instructed to permit a different method of discharge.

Wildlife

W1 - Documentation/Clarification Requests on Wildlife Issues

Comments:

The EA states that wildlife field inspections were conducted within the appropriate season to determine the presence of sensitive, endangered, or threatened species. While the EA admits that these inspections are not absolute determinations of presence or absence...no details are given as to the type, frequency, or intensity of inspections.

The BLM asserts that wildlife would not be impacted by the project (EA-32 and elsewhere), but provides no evidence of research or monitoring that document these assertions. The EA provides no information on populations and population trends of wildlife.

Response:

Field visits were made several times to each of the proposed drill sites during winter, spring and summer. These trips included initial onsite and followup visits made during field season (April-November). Inspections were done by walking the sites and adjacent habitat, glassing with 8x binoculars from suitable locations and listening for birds. Populations and trends for all species fall within the domain of Montana Fish, Wildlife & Parks, and available data was lacking. Any indication of any presence of a species of concern (SSS), would have triggered further inventory or monitoring by BLM personnel. The analysis assumes there may be incidental use by some SSS with suitable habitat within the area. The small scale of unoccupied habitat lost will have minimal short or long term impact to those species.

Comment:

Sage grouse and other species can be affected by snowmobiles and other ORVs.... As a consequence, wildlife often suffer increased winter mortality in areas where snowmobiles are used, even in low intensities...The EA states that habitat is available for summer and fall foraging (EA 25), but mitigation measure #18 only applies to the period from 3/1-6/30.

Response:

This is not a documented sage grouse wintering area and no sites showed any indication that any concentration of birds occurred during winter months. Field visits by the BLM biologist and other BLM personnel occurred several times over the last few years, including winter months. No sage grouse were ever observed near any of the proposed sites and the one known lek is isolated by distance and topography. Any indication of presence of an SSS would have triggered further inventory or monitoring.

Comment:

Elk mitigation measures in #18 may not protect elk throughout the full season either.

Response:

The mule deer/elk mitigation measures included in the EA (no drilling Dec.1-June 30) protect these species during the winter and spring fawning/calving. These are the critical times for these species in which disturbance can cause excessive impacts. The timing of the proposed action and the use of existing trail/roads will minimize impacts for the local populations. The current elk population is small and has not yet fully occupied suitable habitat. If present at the time of drilling, they may temporarily shift to other habitat at this non-crucial time. Mule deer numbers are good and are widespread in and out of the project area. The proposed activity will cause a temporary small shift in their use of the area during the time of drilling and completion. As these roads are existing, the duration of the activity is short-term, and drilling will occur outside the critical times for these species, impacts are minimal.

Comment:

The EA admits that “temporary displacement” wildlife will take place, but does not evaluate the potential for long-term displacement to occur for TE & SSS species. (EA Wildlife)

Response:

While BLM assumed some SSS may be present, none were observed and no evidence was obtained that they occupied the proposed project area (except sage grouse lek within one mile, separated by distance and topography). It is impractical to discuss long term displacement of T&E or SSS for an area in which they have not been observed and are not known to occur. Any indication of presence of a SSS, would have triggered further inventory or monitoring. If SSS were observed any additional impacts would have been discussed and additional mitigation required.

W2 - Concurrence with USFWP

Comments:

...while the EA finds that the only listed species found in the analysis area is bald eagle and concludes that the proposed action will not affect this species or its habitat, it does not detail whether the USFWS concurred with this assessment....Nowhere in the EA is there indication that the USFWS has been informed of this action and that it concurs with the BLM’s “no affect” determination.

The EA does not indicate that consultation with the appropriate agencies will occur until T&E species are observed within the work area. It is our opinion that this would be too late; the FWS should be consulted previous to beginning the disturbance.

Response:

While BLM assumed bald eagles migrate through the project area and may be present for short periods, none were observed and no evidence was obtained that they make anything other than incidental use of the entire Missouri River Breaks area. There is no evidence, direct or indirect, of bald eagle use in the project area. As very few trees will be removed in an area with many much larger trees with better roosting opportunities, the loss of a couple of smaller trees will not have any impact on any raptor species. All access and roads currently exist and no new access will be created which could disturb wildlife. Any indication of presence of a T&E species, would have triggered further inventory or monitoring. If bald eagles were observed making use of the area, impacts would have been discussed and consultation required. A "Determination of No Affect" was done by the BLM biologist based on the best information available. A "Determination of No Affect" indicates there is no need for consultation with the USFWS based on the available information and/or the small scale of impacts.

W3 - Wolves

Comment:

Several years ago Clark Whitehead of the Lewistown BLM office told me of several reliable wolf sightings in Cow Creek. There is no discussion in the EA that these reports have even been considered.

Response:

Neither the Fish & Wildlife Service, nor the Montana Fish, Wildlife and Parks have substantiated a wolf sighting in the Missouri River Breaks, for over 25 years. While "reports" of wolves are common, it is unlikely that a resident wolf would go unconfirmed through reliable sightings or livestock kills indefinitely. Due to the level of trapping of coyotes and bobcats, mountain lion hunting, and predator control which occurs in the Missouri River Breaks, it is unlikely even a lone animal would have avoided being observed or destroyed. Any indication of presence of a T&E species, would have triggered further inventory or monitoring. If wolves had been documented, any additional impacts would have been discussed and consultation with USFWS required.

W4 - Threatened and Endangered Species/Species of Concern

Comment:

State of Montana Species of Concern were not addressed. Three reptile species, the short-horned lizard, the sagebrush lizard and hog-nose snake are species of concern whose home range includes the area slated for drilling. The disposition of these species' habitat needs to be addressed in the EA.

Response:

While no specific inventories were done for all species which have potential to occur in this habitat type, no observations have been made by BLM personnel of either the sagebrush lizard or hog-nosed snake within the project area. Short-horned lizard have been observed rarely, but have a very low population density which is not likely to be impacted by the small scale of new disturbance in this project. This species is widespread throughout Montana and the western states. BLM designated Special Status Species (SSS) for Montana includes many State of Montana Species of Concern as determined by Montana Natural Heritage Program. Many of the species not included by BLM were not felt to warrant inclusion based upon their wide distribution within the state and elsewhere.

APPENDIX C:

Errata Modifications, Corrections, and Additions

Appendix C

Errata Modifications, Corrections, and Additions

This section is a list of page-specific, substantive changes or revisions in the text of the environmental assessment and FONSI which were suggested in public comment letters and the response to new information. Minor changes to correct errors in punctuation, spelling, etc. have not been listed.

MODIFICATIONS/CORRECTIONS TO THE FONSI

Page 3, line 2, Compliance and Monitoring, Delete "...a monitoring program shall be implemented by Macum/Klabzuba/Ocean" and replace with "...a monitoring program shall be implemented by BLM." The monitoring plan can be found at the end of this appendix.

MODIFICATIONS/CORRECTIONS TO THE EA

The Environmental Assessment will now contain a Table of Contents, which can be found at the end of this appendix.

Page 1, Location of Proposed Action, #42-34. Delete "MTM 16103," and replace with "MTM 01903A."

Page 4, Table 1. Drilling summary, item 9. Delete "seven," and replace with "three to five."

Page 7, Need for the Proposed Action. At the end of the paragraph, insert a new paragraph which reads: "At the current productive rate of a well located in Section 36, T25N, R19E, drainage to federal lease MTM 89082 is imminent. Klabzuba's Well #1-25-19 is necessary to protect the federal lands from drainage."

Page 28, Visual Resources, paragraph 1, sentence 4. Delete entire sentence.

Page 40, Mitigating Measures, item 1. Delete "Areas with high erosion potential and/or rugged topography (i.e., steep slopes, floodplains, unstable soils)..." and replace with "Soils having high wind or water erosion potential and/or rugged topography (i.e. steep slopes (>25%) floodplain , unstable soils/geomorphology/geology)..."

Page 40, Mitigating Measures, item 4. Delete "Removed vegetation would be replaced with plants using procedures including the following:" and replace with "Sites requiring the removal of soil and or vegetation will use the following procedures:"

Page 40, Mitigating Measures, item 4. Delete item 4, a., b., c., d., e., and h., and replace with:

- a. Identify soil type(s) and depth of topsoil/surface layer (usually 4-6 inches) for removal and stockpile separately for later use in reclamation.

- b. Identify depth of subsoil layer (usually 6-12 inches) for removal and stockpile separately for later use in reclamation. The remaining deeper material will be used or moved as necessary to meet the needs for drilling activities.
- c. Site reclamation will initiate with the ripping of any compacted areas and grading to blend with the adjacent site characteristics and topography. Any water bars required will be placed and shaped at this time. The stockpiled subsoil will be spread evenly across the site followed by the stockpiled topsoil. In no instances will grading material and or subsoil be placed over topsoil. The order of soil replacement will be the reverse of removal, e.g. first off, last on.
- d. Topsoil and subsoil that is stockpiled and not respread within 30 days, will be protected from erosion and loss of material by planting a quick growing cereal grain such as wheat or barley. In no instances will subsoil be allowed to be placed over topsoil. In addition, if topsoil mycorrhizae are compromised (due to compaction or anaerobic conditions), Operators may be required to supplant the soil with mycorrhizae to speed the recovery of the revegetation and return the soil to productivity.
- e. All seed mixes necessary to achieve site reclamation will consist of native grasses, forbs, shrubs adapted to the Soil and Ecological site (Range Site) and will be incorporated into each well's Condition of Approval. All seed sources will be certified as being Noxious weed seed free and the label will become a permanent part of the file. Reseeding if needed will employ harrow, broadcast, harrow or drill seeding procedures. In either method the last trip across the reclaimed site will be across the slope to approximate the contour and reduce risk of erosion.
- h. Where appropriate, BLM approved herbicides, rates and techniques for weed control will be applied. This may include the use of selected biological control agents. Soil sterilants will not be used and any spills or accidental releases of material toxic to soils or vegetation will be promptly contained, cleaned up for proper disposal.

Page 40, Mitigating Measures, item 4. Add 4.j., "The use of fertilizers or soil amendments is discouraged, unless monitoring has indicated a need to supplement soil nutrients or adjust a soil chemical imbalance. e.g. The use of pelletized elemental sulfur to adjust soil pH to promote seed germination and seedling growth."

Page 42, Mitigating Measures, item 14. Delete. Incorporated into item 4.d. described above.

Page 42, Mitigating Measures, item 18. Add "or construction" after the word "drilling" in each of the three mitigation measures.

Page 43, Mitigating Measures, item 24. Delete last sentence and replace with "Additionally, portions of well locations not used during production and other disturbed sites would be reclaimed and reseeded as soon as possible, with the objective to have a stable, revegetated site within two years."

MONITORING PROGRAM

The primary focus of the monitoring program will be to ensure compliance with existing rules, regulations, and any special mitigation measures developed through this environmental analysis process. Mitigation measures may be imposed in different ways depending upon the type of document authorizing the activity. Measures would be attached to approved drilling permits as conditions of approval and as stipulations/conditions of approval if any subsequent Right-of-Ways/Sundry Notices are granted for associated roads and pipelines.

Monitoring will also provide information on the effectiveness of the prescribed measures by assessing how the management objectives outlined in the EA, Upper Missouri River Breaks National Monument Proclamation and the State Director's June 2001 Monument Interim Guidance are being met, both in the short-term and long-term. These determinations will be made through site inspections, general observation, quantitative measurements when necessary, contact with landowner and assessment by potentially affected parties.

Short-Term Monitoring Actions

BLM's inspection program includes environmental, drilling, production and abandonment/reclamation related inspections. Inspections are prioritized based on a number of criteria. The presence of important or sensitive resource values is one factor that is considered. Due to the location of potential well sites relative to the Upper Missouri River Breaks National Monument, BLM will rank both environmental and drilling inspections as a high priority when wells are drilled in this area. BLM would be notified of the start of site construction activities and well drilling. At the time BLM is notified of the start of activities, an assessment would be made regarding the sensitivity of the proposed area for disturbance and appropriate inspections would be planned. Surface owners, and other State or Federal agencies, as appropriate, would also be notified of inspections that may be scheduled.

For federally permitted activities pre-work conferences will take place prior to any surface-disturbing activities related to constructing access roads, well pads and pipelines. During this inspection, the operator's proposed drilling and surface use plans would be discussed along with required mitigation measures. These site inspections are typically attended by a BLM representative, gas operator, dirt contractor, drilling contractor, and the landowner if the well site is on private surface overlying Federal minerals.

Drilling inspections will ensure compliance with the conditions or terms of the approved drilling permit(s)/agreements, as applicable. Typical requirements relate to site construction, blowout prevention equipment, mud program, and casing and cementing program.

Once the drilling is completed, the well would either be put into production if productive, or plugged and abandoned. Site restoration and reclamation would be done on those areas no longer needed for oil and gas related activities (for non-productive wells, the entire well site would be reclaimed as quickly as possible). Once productive wells have been depleted, production equipment would be removed and the wells would be plugged and abandoned. Those areas used for production facilities would also be reclaimed. Prior to release of the Federal bond, BLM would ensure that appropriate reclamation has taken place. This would either be done through a site inspection or consultation with the surface owner, as appropriate. State bonds are also required.

Long-Term Monitoring Actions

Monitoring actions extend beyond the site construction and drilling phase. Long-term resource objectives and management prescriptions outlined in the EA and Upper Missouri River Breaks National Monument Proclamation and the State Director's June 2001 Monument Interim Guidance are to be maintained through the life of the producing wells. Proper maintenance of producing wells and associated facilities in compliance with terms of the associated permits, along with mitigating measures would be necessary to ensure that these objectives or prescriptions are met.

BLM inspectors conduct on-site inspections during the producing phase of a well. BLM production inspections, conducted by a Petroleum Engineering Technician, are conducted once per year. If conditions or terms of the permits require additional expertise from other staff within BLM or entities with specialized knowledge, appropriate personnel would be involved. This could include resource protection specialists, such as wildlife biologists, environmental scientists, or others. Consultation with outside subject matter experts would be requested, as necessary. Inspections include an assessment of compliance with the conditions/terms and special mitigation measures, whether production is being properly measured and reported for royalty purposes, whether public health and safety is protected, whether site security is adequate, and whether the environment is being protected. BLM would coordinate monitoring efforts with the adjacent surface management agencies, where appropriate. Should the Montana Board of Oil and Gas Conservation Commission observe problems or receive complaints specific to well sites or production facilities, BLM would be contacted and appropriate action would be taken to correct the situation.

During the production phase, regular inspection and preventive maintenance visits to the well and related facilities would be made by the operator's well tender/pumper. These are opportunities for the operator to identify and quickly remedy problems that may occur.

Monitoring actions are focused on ensuring the effective implementation of the prescribed mitigation measures which, in turn, will result in maintaining resource objectives. If resource objectives are not maintained or new concerns are discovered, corrective action would be required. Specific actions would differ depending upon the identified problem.

Inspections and Enforcement

Table D-3 outlines inspections performed by BLM during all phases of oil and gas operations. The agencies may make additional inspections on an as-needed basis at any time. BLM inspects Federally permitted wells to assure that the wells are in compliance with all the requirements of BLM lease terms, regulations, Orders, Notices to Lessees and Conditions of Approval on the APD. In cases of non-compliance, BLM takes measures that become progressively more severe if an operator continues in non-compliance. In order from least to most severe, these measures include Notice of Incidents of Non-Compliance (INC), which requires correction within a specified time frame; monetary assessments; shutting down operations; civil penalties; claiming the Federal bond; and finally lease cancellation. In cases of non-compliance that threaten severe environmental damage or loss of life, BLM can enforce immediate shut down of operations.

Table D-3. Inspections

Activity	BLM
<u>Inspection of Areas Proposed for Use/Disturbance</u>	Pre-work inspection with landowner, operator,* operator's representatives (i.e. dirt contractor, drilling company, etc.) - all wells authorized through Federal drilling permit and subsequent production facilities if proposed and approved.
<u>Construction Phase</u>	Witness all aspects of construction activities - all wells authorized through Federal drilling permit
<u>Drilling Phase</u>	Witness Blowout Preventor test, setting and cementing of surface and production casing - all wells authorized through Federal drilling permit
<u>Completion Phase</u>	Normally no well operation inspection. Inspect surface restoration of unused portion of the well pad - all wells authorized through Federal drilling permit
<u>Production Phase</u>	Inspect well and facility once per year - all wells authorized through Federal drilling permit and within Federal agreement areas
<u>Plugging and Abandonment Phase</u>	Witness well plugging - all wells authorized through Federal drilling permit Inspect surface restoration with landowner

*Operator-oil and gas operator

General Reporting Requirements

BLM requires at 43 CFR 3162.5 Environment and Safety, 3162.5-1 Environmental obligations, (c), that:

"All spills or leakages of oil, gas, produced water, toxic liquids, or waste materials, blowouts, fires, personal injuries, and fatalities shall be reported by the operator in accordance with these regulations and as prescribed in applicable order or notices. The operator shall exercise due diligence in taking necessary measures, subject to approval by the authorized officer, to control and remove pollutants and to extinguish fires"

"When reasonably required by the authorized officer, a contingency plan shall be submitted describing procedures to be implemented to protect life, property, and the environment."

In regard to incidents listed above, BLM Notice to Lessees NTL-3A, Reporting of Undesirable Events describes major and other-than-major undesirable events and reporting requirements to BLM. All such events which occur on State or private leases included in Federal agreements must also be reported as required in the NTL. The NTL also states that the BLM can require the operator to submit an SPCC Plan or other acceptable contingency plan. Under the Federal Clean Water Act (CWA), as amended, an operator is required to prepare a Spill Prevention, Control and Countermeasure (SPCC) Plans if, due to the facility's location, one could reasonably expect a discharge into or upon the navigable waters of the United States if a spill occurred.

SUMMARY OF BLM REGULATIONS, ORDERS, NOTICES TO LESSEES

Onshore Oil and Gas Operating Regulations at 43 CFR 3162.1 (General Requirements) and 43 CFR 3162.5 (Environment and Safety) require operators to perform operations and maintain equipment in a safe and workmanlike manner and provide adequate protection for health and safety of life and the protection of property.

Onshore Order #1 (Approval of Operations on Onshore Federal and Indian Oil and Gas Leases) requires site specific surface use and drilling programs in the Application for Permit to Drill, including a description of well control devices and testing procedures; expected bottom hole pressures, anticipated abnormal pressures or temperatures or potential downhole hazards and contingency plans to mitigate such hazards; and methods and locations for safe containment and disposal of each type of waste material that results from drilling of the proposed well. Also specifies filing requirements for subsequent operations, including well and production operations and surface disturbing operations, and well abandonment.

Onshore Order #2 (Drilling Operations) details requirements for well control equipment and testing; casing and cementing requirements in regard to lost circulation zones, abnormally pressured zones, and protection of usable water; mud program requirements and drilling abandonment. Has special requirements for air drilling operations including use of special equipment and locations and distances for the bloop line discharge/air compressors.

Onshore Order #5 (Measurement of Gas) details requirements for and minimum standards for the measurement of gas by orifice meter or other methods acceptable by the authorized officer. Proper gas measurement ensures that the Federal Government, the general public, State Governments which share in the proceeds receive the royalties due, as specified in the governing oil and gas leases.

Onshore Order #7 (Disposal of Produced Water) specifies requirements and standards Federal oil and gas operators must comply with for the protection of surface and subsurface resources when disposing of produced water from oil and gas wells completed on Federal leases. For each Federally permitted well, operators must apply to the BLM for approval of the disposal of produced water.

Notice to Lessees and Operators 3A (NTL 3A - Reporting of Undesirable Events) specifies the requirements for reporting of spills, discharges, equipment failures, fires, venting, blowouts, accidents, life-threatening injuries, and fatalities.

MACUM ENERGY INC./KLABZUBA OIL & GAS INC./OCEAN ENERGY RESOURCES INC.
NATURAL GAS PROJECT ENVIRONMENTAL ASSESSMENT
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